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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,118	06/26/2003	Chris Richburg	84,568	1031

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COASTAL SYSTEMS STATION
DAHLGREN DIVISION
NAVAL SURFACE WARFARE CENTER
6703 W HWY 98 CODE CP2L
PANAMA CITY, FL 32407-7001

EXAMINER

LOUIS JACQUES, JACQUES H

ART UNIT	PAPER NUMBER
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3661

DATE MAILED: 06/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/608,118

Applicant(s)

RICHBURG ET AL.

Examiner

Jacques H. Louis-Jacques

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 26 June 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No. 10/609,902. Although the conflicting claims are not identical, they are not patentably distinct from each other because the guidance transmitter and guidance receiver of the abovementioned copending application are not needed to carry out the claimed invention of the present application. It is well settled that the omission of an element, and its function is an obvious expedient if the remaining elements perform the same function as before. *In re Karlson*, 136 USPQ 184 (CCPA 1963). Also note *Ex parte Rainu*, 168 USPQ 375 (Bd. App. 1969). Omission of a reference element of step whose function is not needed would be obvious to one of ordinary skill in the art.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

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3. Claims 1-20 are also provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-16 of copending Application No. 10/609,901. Although the conflicting claims are not identical, they are not patentably distinct from each other because the he database and the calibration waveforms recites in the claims of the abovementioned copending application are not needed to carry out the claimed invention of the present application. It is well settled that the omission of an element, and its function is an obvious expedient if the remaining elements perform the same function as before. **In re Karlson**, 136 USPQ 184 (CCPA 1963). Also note **Ex parte Rainu**, 168 USPQ 375 (Bd. App. 1969). Omission of a reference element of step whose function is not needed would be obvious to one of ordinary skill in the art.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-2, 7-13, and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lundström [4,773,018] in view of Williams et al [US 2003/01333291 A1].

Lundström discloses a system for defining a line of approach to be used in a light tracking automatic navigation system for controlling the movement of an automatically

guided vehicle. According to Lundström, there is provided a plurality of (at least one) light sources (figures 1-2 and column 3). Also, according to Lundström, there is provided defining a primary field-of-view from which all of the light sources are visible wherein less than all of the light sources are visible from positioning outside of the primary field-of-view (FOV), and wherein the light sources are divided into a plurality of sections with each of the plurality of sections having a portion of the light sources associated therewith (columns 2-3 and 5). Furthermore, as described in columns 3 and 4, Lundström discloses controlling operation of the light sources based on prescribed patterns or waveforms. The light sources, according to Lundström, are light emitting diodes (LEDs). See columns 3 and 4. Lundström also discloses that the light sources are supported by a frame so that the array of light sources is a two-dimensional planar array (column 5). Lundström further discloses in column 5 that only a set of light source is illuminated at one time and each time a light source is lit, it creates a waveform defined by the turning on and off of the light sources. However, Lundström does not particularly all the operating conditions of the light sources. Williams et al, on the other hand, discloses a light apparatus having a plurality of light sources arranged in an array, wherein the light sources (emitters) are light emitting diodes (abstract). According to Williams et al, the light sources are divided into a plurality of sections with each of the plurality of sections having a portion of the light sources associated therewith (pages 1 and 5). The lighting sources, according to Williams et al, are operated in accordance with cyclical on/off sequences (with the same color or different colors), wherein the sequences are associated with a corresponding one of the plurality of sections, identical for the portion of the light sources associated with

the corresponding one of the plurality of sections, and unique for each of the plurality of sections. See pages 1 (right column) and 2 (left column). Williams et al further discloses at least one timer, wherein one cycle of each of the cyclical on/of sequences includes a pulse of common duration and wherein the one cycle associated with each of the plurality of sections is distinguishable by the timing of the pulse within the one cycle (page 2). On pages 1 and 2, Williams et al discloses that light sources are controlled so that they produce light energy having the same wavelength, i.e., during the same period or interval of time. Williams et al discloses that the lighting emitters (sources) may be light emitting diodes, laser lights or super bright light emitting diodes (which can produce light energy having a wavelength in the range of approximately 390 nm to approximately 577 nm). See page 3. On page 1, Williams et al discloses that the light emitters (sources) are spaced apart along a concave surface so that the lights emitters emit lights around the concave surface. Thus, it would have been obvious to one of ordinary skilled in the art at the time of the invention to be motivated to modify the light tracking automatic navigation system of Lundström by incorporating the features from the lighting apparatus of Williams et al because such modification would provide a safe and reliable system.

6. Claims 3-6 and 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lundström [4,773,018] in view of Williams et al [US 2003/01333291 A1] as applied to claims 1 and 12 above, and further in view of Waldmann [6,728,464].

Neither Lundström nor Williams et al specifically teaches the type shape of the array of the lighting sources. Waldmann, on the other hand, discloses an illumination element having at least one light guide for receiving and guiding light beams emitted by a light

source, wherein the light guide having at least one reflection element and at least one surface transparent from the light beams (abstract). According to Waldmann, there is provided a frame (support) supporting the light sources, wherein the light sources are arranged in a two or three-dimensional array (columns 2 and 3). In addition, according to Waldmann, the light sources are divided into a plurality of sections, which are separated by a reflective wall. As shown in the figures, the three dimensional array has a shaped selected from a group consisting of dome shapes and pyramid (triangular) shapes. See also columns 2 and 3. Thus, it would have been obvious to one of ordinary skilled in the art at the time of the invention to be motivated to modify the combination of Lundström and Williams et al by incorporating the features from the illumination element for motor vehicles of Waldmann because such modification would ensure that reflected light beams are reflected in a directed way to certain specific locations or areas (Waldmann, column 1).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

4,626,995	Lofgren et al	Dec. 1986
4,653,002	Barry	Mar. 1987
4,782,357	Hayakawa et al	Nov. 1988
4,786,167	Rothbone et al	Nov. 1988
5,162,643	Currie	Nov. 1992

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5,291,195	Gross	Mar. 1994
6,530,683	Ohkohdo et al	Mar. 2003
US 2004/0094717 A1	Griffin et al	May 2004

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacques H Louis-Jacques whose telephone number is 703-305-9757. The examiner can normally be reached on M-Th 6:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on 703-305-8233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 571-272-3600 (toll-free).

Jacques H Louis-Jacques
Primary Examiner
Art Unit 3661

/jlj

Jacques H. Louis-Jacques
JACQUES H. LOUIS-JACQUES
PRIMARY EXAMINER